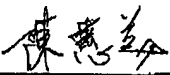

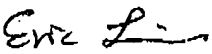


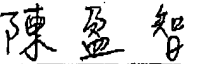


Exhibit A

ASAC

Invention Disclosure

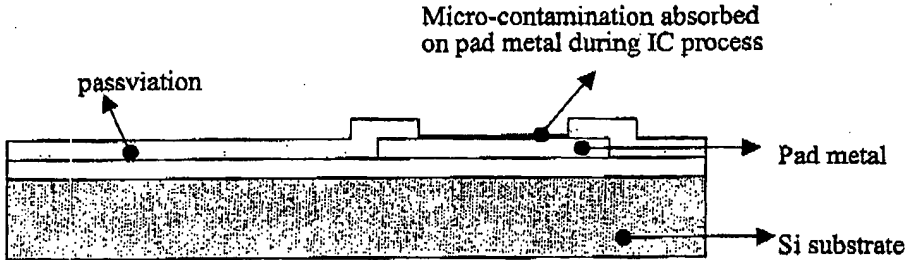
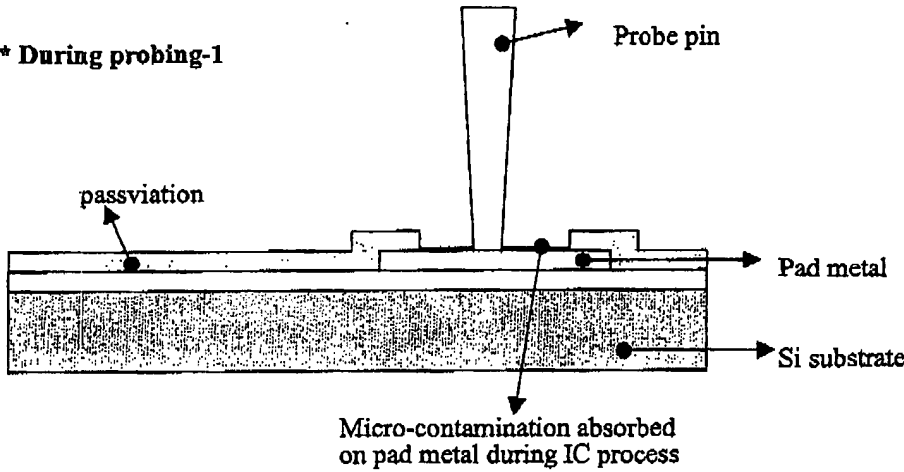
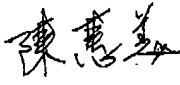

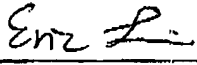

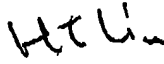

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Full Name(s) of Inventor(s)		Employee No.	Department	Dept. Code	Tel No.	For Use by IP Law Disclosure No.
English	Chinese					
HMChen	陳慧珍	058	IEPM			18602-005
CKChou						Received Date (Time Stamp)
JYLee	李維強	006				
HTLiu						
Title of Invention - • English: A Clean process for finishing IC product • Chinese						
Background Information - Current Practice and Disadvantages All the final process steps of metal pad or metal bump are chemical process in the current IC process. There is micro-contamination absorbed on the final metal surface. Over killed problem happen sometimes during chip probing due to micro-contamination on metal pad.						
Main Points of Claim (Please List Item by Item) Add in a physical clean after finish IC process before chip probing. The physical clean can be a inner gas plasma, sputtering etch, ion mill or any bombardment clean.						
Problem Solved or Improvements Obtained by this Invention (Please List Item by Item) To reduce over killed problem during chip probing.						
Keyword Search for Patent/Literatures						
Patent/Literatures Search Result (Please Specify Similar Patent No. and Literature Citation)						
Detailed Description of Invention - (Continued Next Page)						
Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.		Disclosure Submitted by				
		Inventor's Signature Date		Inventor's Signature Date		
						
		Inventor's Signature Date		Inventor's Signature Date		
Signature of Witness Date 						
Signature of Witness Date 						



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		MES 02-005	
Current practice 1:			
* After finish IC process			
			
* During probing-1			
			
Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.		Disclosure Submitted by	
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Signature of Witness	Date	Inventor's Signature	Inventor's Signature
			
Signature of Witness	Date		
			



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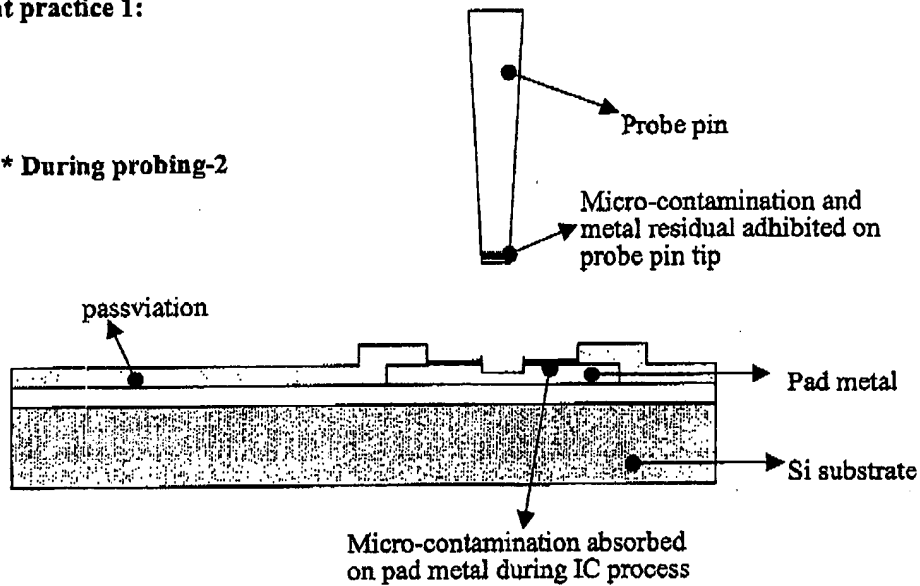
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Detailed Description of Invention – Continued	For Use by IP Law
	Disclosure No.

116902-005

Current practice 1:

* During probing-2



Witnesses: The Two Witnesses
whose Signatures appear below
have Read and Understand this
Entire Invention Disclosure.

Signature of Witness Date

Eric L.

Signature of Witness Date

陳盈智

Disclosure Submitted by

Inventor's Signature Date

陳慧英

Inventor's Signature Date

J Lee

Inventor's Signature Date

Chen

Inventor's Signature Date

HT Lin



Invention Disclosure

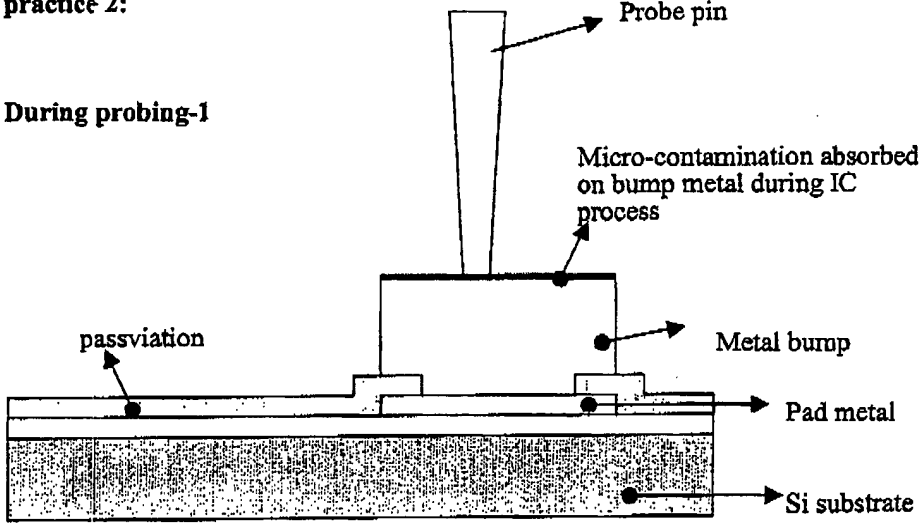
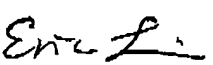

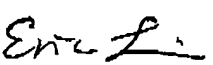

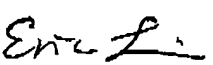

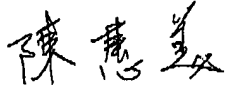


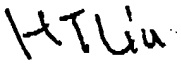
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Detailed Description of Invention – Continued		For Use by IP Law	
		Disclosure No.	
		MEG02-005	
<p>Current practice 1:</p> <p>* During probing-3</p> <p>Micro-contamination and metal residual adhibited on probe pin tip, the micro-contamination cause over kill of open circuit during CP test</p> <p>passivation</p> <p>Probe pin</p> <p>Pad metal</p> <p>Si substrate</p> <p>Micro-contamination absorbed on pad metal during IC process</p>			
<p>Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.</p> <p>Signature of Witness Date</p> <p>Eric Li</p> <p>Signature of Witness Date</p> <p>陳亞智</p>		Disclosure Submitted by	
		Inventor's Signature Date	
		陳惠美	
		Inventor's Signature Date	
		Inventor's Signature Date	
		JT Lee	
		Inventor's Signature Date	
		HT Lin	



Invention Disclosure

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Detailed Description of Invention – Continued		For Use by IP Law							
		Disclosure No.							
		MEG 02-005							
<p>Current practice 2:</p> <p>* During probing-1</p> 									
<p>Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.</p> <table border="1"><thead><tr><th>Signature of Witness</th><th>Date</th></tr></thead><tbody><tr><td></td><td></td></tr><tr><td></td><td></td></tr></tbody></table>		Signature of Witness	Date					Disclosure Submitted by	
		Signature of Witness	Date						
									
									
Inventor's Signature Date		Inventor's Signature Date							
									
Inventor's Signature Date		Inventor's Signature Date							
									



Invention Disclosure

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Detailed Description of Invention – Continued		For Use by IP Law	
		Disclosure No.	
		MEG02-005	
<p>Current practice 2:</p> <p>* During probing-2</p> <p>Micro-contamination and metal residual adhibited on probe pin tip</p> <p>Micro-contamination absorbed on bump metal during IC process</p> <p>passivation</p> <p>Metal bump</p> <p>Pad metal</p> <p>Si substrate</p>			
<p>Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.</p> <p>Signature of Witness Date</p> <p><i>Eric Li</i> _____</p> <p>Signature of Witness Date</p> <p><i>陳盈智</i> _____</p>		Disclosure Submitted by	
		Inventor's Signature Date	
		<i>陳惠基</i> _____	
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Signature of Witness Date			
<i>陳盈智</i> _____			
Signature of Witness Date			
<i>HT Lin</i> _____			



Invention Disclosure

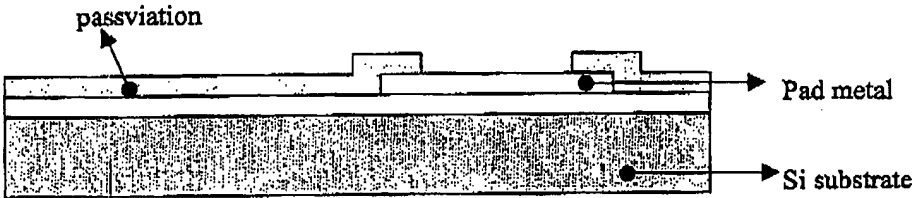
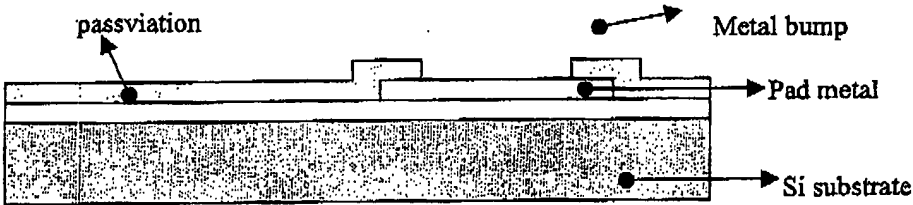


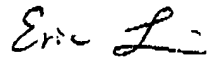
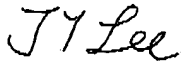
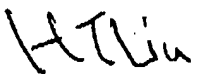

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Detailed Description of Invention – Continued		For Use by IP Law
		Disclosure No.
		MEG02-005
<p>Current practice 2:</p> <p>* During probing-3</p> <p>Micro-contamination and metal residual adhibited on probe pin tip, the micro-contamination cause over kill of open circuit during CP test</p> <p>Micro-contamination absorbed on bump metal during IC process</p> <p>passivation</p> <p>Metal bump</p> <p>Pad metal</p> <p>Si substrate</p>		
Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.	Disclosure Submitted by	
	Inventor's Signature	Inventor's Signature
	Inventor's Signature	Inventor's Signature
Signature of Witness	Date	
Signature of Witness	Date	



Invention Disclosure



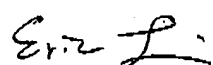
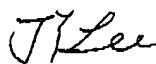
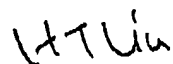
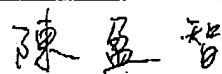
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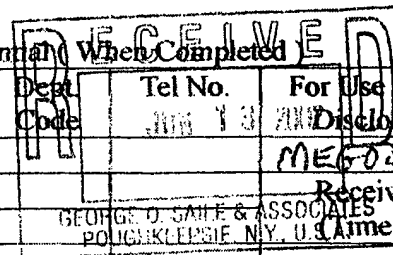
Detailed Description of Invention – Continued		For Use by IP Law	
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		MEG02-005	
New invention:			
* After finish IC process			
Add in a physical clean ex. Ar sputtering or ion mill to remove micro-contamination. The surface become very clean with no chemical absorption.			
			
			
Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.		Disclosure Submitted by	
		Inventor's Signature	Date
			
		Inventor's Signature	Date
Signature of Witness	Date	Inventor's Signature	Date
			
			



Invention Disclosure

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Detailed Description of Invention – Continued		For Use by IP Law Disclosure No. MEG 02-005	
<p>New invention:</p> <p>The over kill problem will be eliminated during chip probing after this physical surface clean</p>			
Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.		Disclosure Submitted by	
		Inventor's Signature Date	Inventor's Signature Date
Signature of Witness Date			
		Inventor's Signature Date	Inventor's Signature Date
Signature of Witness Date			
			



Full Name(s) of Inventor(s)		Employee No.	Department	Dept. Code	Tel No.	For Use by IP Law Disclosure No.
English	Chinese					
						MEG02-005
						Received Date (Stamp)

Title of Invention –

☐ English: A Clean process for finishing IC product

☐ Chinese

Background Information – Current Practice and Disadvantages

All the final process steps of metal pad or metal bump are chemical process in the current IC process. There is micro-contamination absorbed on the final metal surface. Over killed problem happen sometimes during chip probing due to micro-contamination on metal pad.

Main Points of Claim (Please List Item by Item)

Add in a physical clean after finish IC process before chip probing. The physical clean can be a inner gas plasma, sputtering etch, ion mill or any bombardment clean.

Problem Solved or Improvements Obtained by this Invention (Please List Item by Item)

To reduce over killed problem during chip probing.

Keyword Search for Patent/Literatures

Patent/Literatures Search Result (Please Specify Similar Patent No. and Literature Citation)

Detailed Description of Invention – (Continued Next Page)

Please see next page

Witnesses: The Two Witnesses whose Signatures appear below have Read and Understand this Entire Invention Disclosure.

Signature of Witness Date

Signature of Witness Date

Disclosure Submitted by

Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

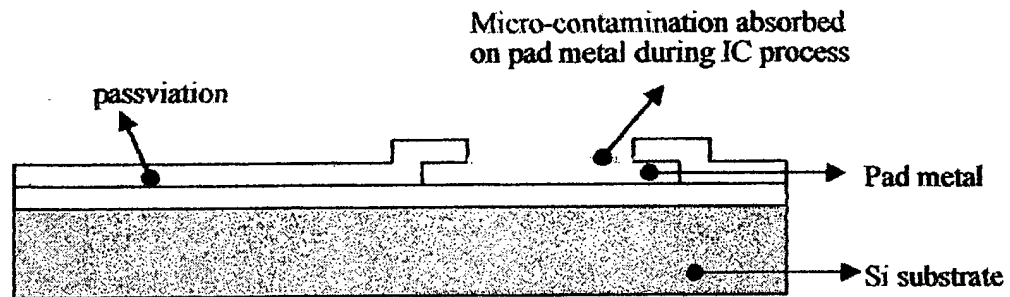
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Detailed Description of Invention – Continued

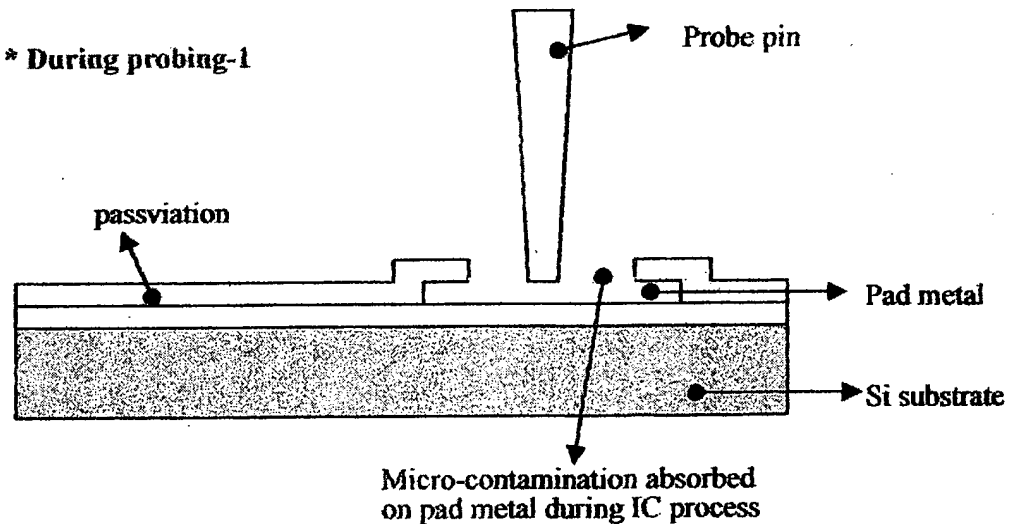
For Use by IP Law
Disclosure No.

Current practice 1:

*** After finish IC process**



*** During probing-1**



Witnesses: The Two Witnesses
whose Signatures appear below
have Read and Understand this
Entire Invention Disclosure.

Signature of Witness Date

Signature of Witness Date

Disclosure Submitted by

Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

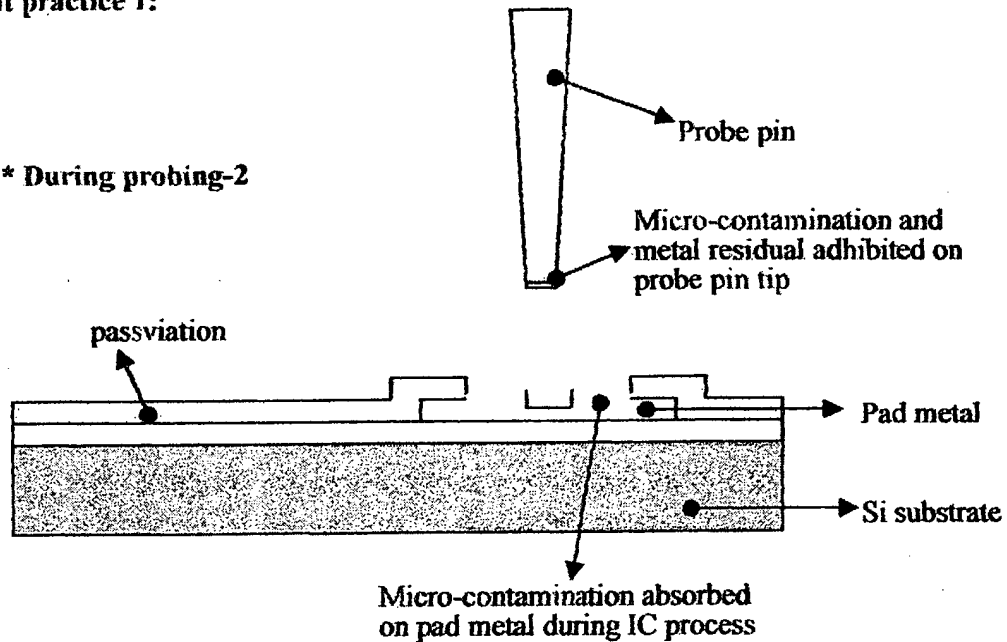
Inventor's Signature Date

Detailed Description of Invention – Continued

For Use by IP Law
Disclosure No.

Current practice 1:

* During probing-2



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have Read and Understand this
Entire Invention Disclosure.

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Signature of Witness Date

Disclosure Submitted by

Inventor's Signature Date

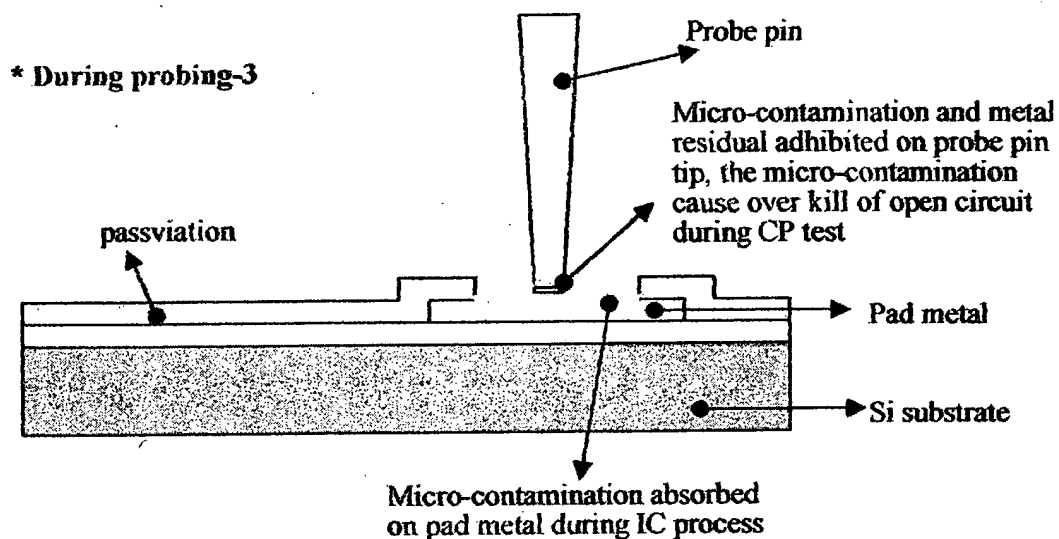
Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

Detailed Description of Invention – Continued	For Use by IP Law Disclosure No.
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Current practice 1:



Witnesses: The Two Witnesses whose Signatures appear below have Read and Understand this Entire Invention Disclosure.

Signature of Witness Date

Signature of Witness Date

Disclosure Submitted by

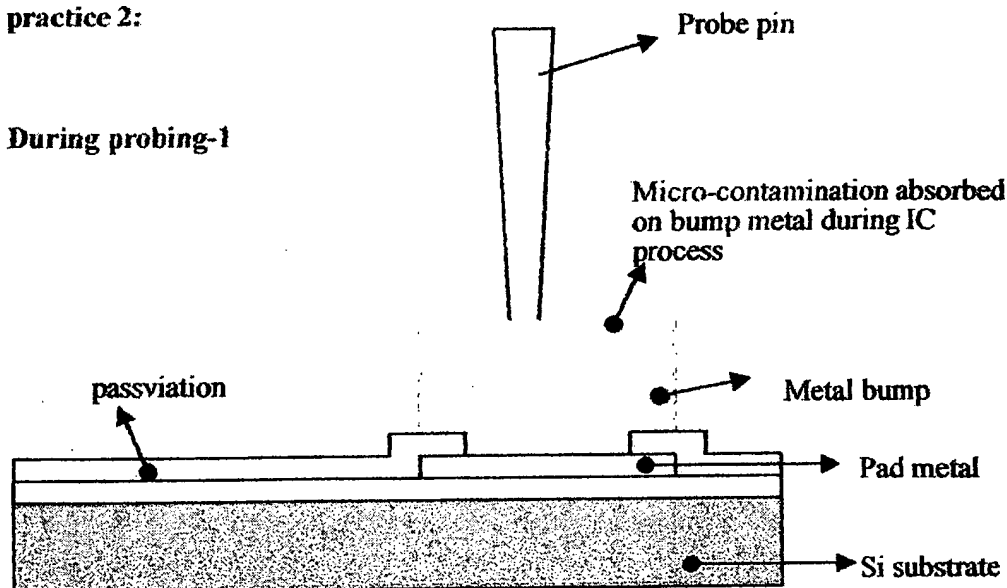
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Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

Detailed Description of Invention – Continued

For Use by IP Law
Disclosure No.**Current practice 2:***** During probing-1**

Witnesses: The Two Witnesses
whose Signatures appear below
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Signature of Witness Date

Signature of Witness Date

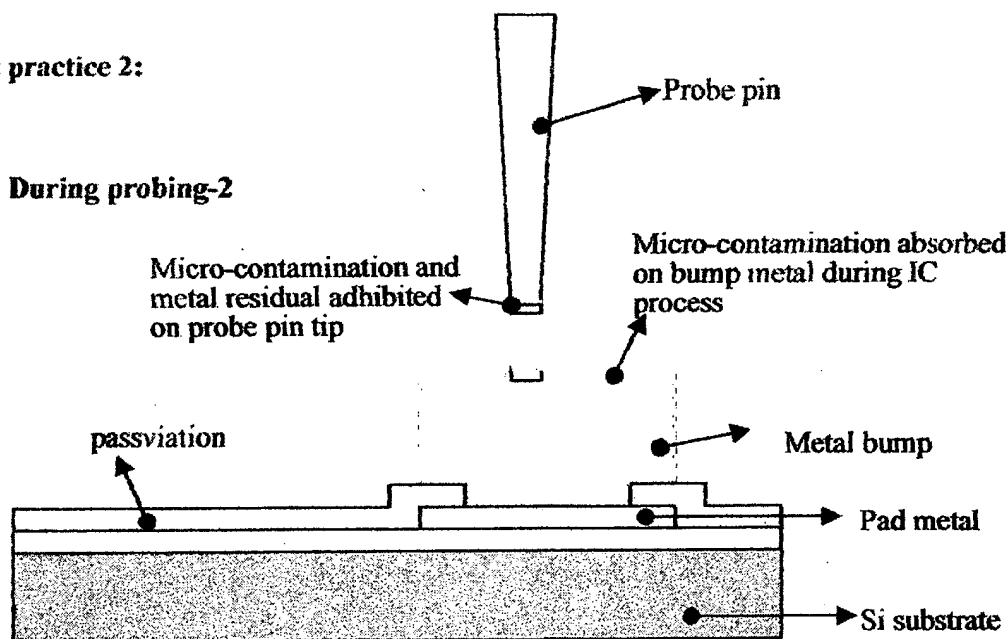
Disclosure Submitted by

Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

Current practice 2:*** During probing-2**

Witnesses: The Two Witnesses
whose Signatures appear below
have Read and Understand this
Entire Invention Disclosure.

Signature of Witness Date

Signature of Witness Date

Disclosure Submitted by

Inventor's Signature Date

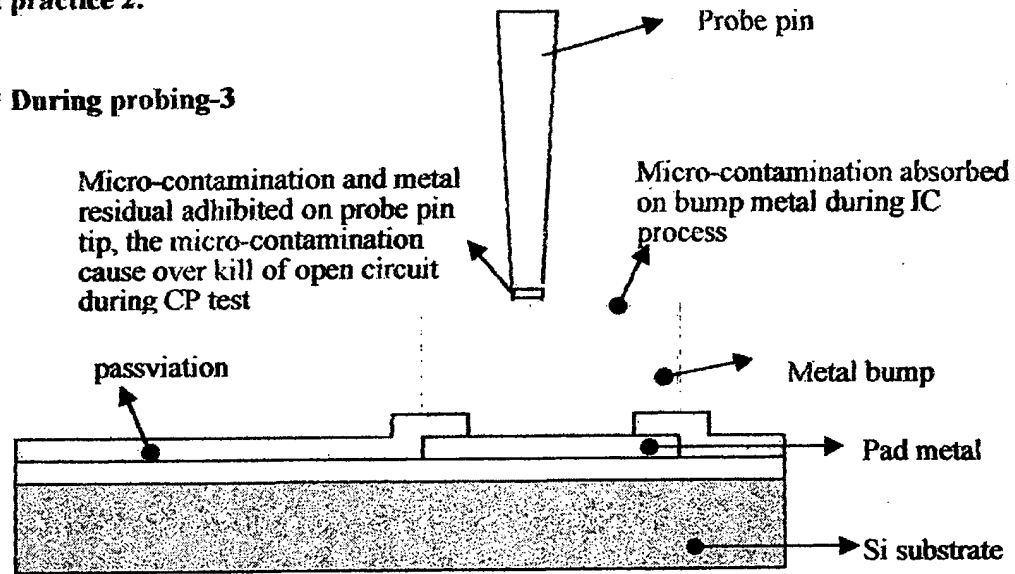
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Current practice 2:

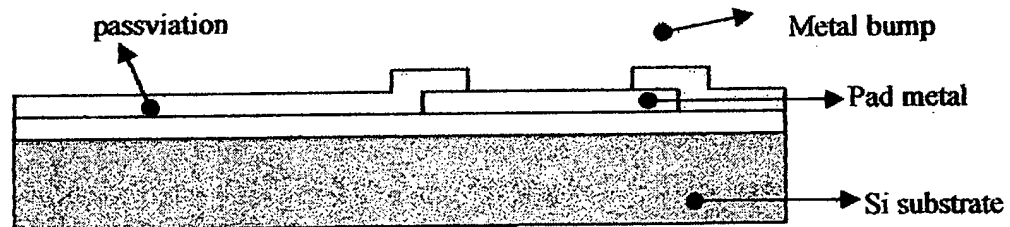
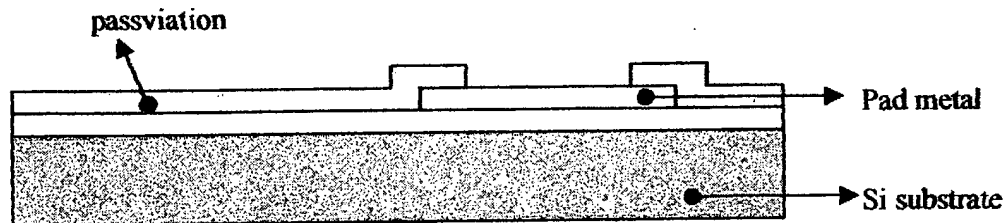
*** During probing-3**



Witnesses: The Two Witnesses whose Signatures appear below have <u>Read</u> and <u>Understand</u> this Entire Invention Disclosure.	Disclosure Submitted by	
	Inventor's Signature Date	Inventor's Signature Date
Signature of Witness Date		
	Inventor's Signature Date	Inventor's Signature Date
Signature of Witness Date		

New invention:*** After finish IC process**

Add in a physical clean ex. Ar sputtering or ion mill to remove micro-contamination. The surface become very clean with no chemical absorption.



Witnesses: The Two Witnesses
whose Signatures appear below
have Read and Understand this
Entire Invention Disclosure.

Signature of Witness Date

Signature of Witness Date

Disclosure Submitted by

Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

Inventor's Signature Date

New invention:

The over kill problem will be eliminated during chip probing after
this physical surface clean

Witnesses: The Two Witnesses whose Signatures appear below have Read and Understand this Entire Invention Disclosure.	Disclosure Submitted by	
	Inventor's Signature Date	Inventor's Signature Date
	Signature of Witness Date	
	Inventor's Signature Date	Inventor's Signature Date
Signature of Witness Date		

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